

Remarks

The subject application has been carefully considered in view of the Examiner's action of March 4, 2003. Accordingly the Specification has been amended on page 6 to delete the alleged new matter added with the amendment of February 11, 2003. The claims are amended to reduce their number and to more particularly point out and distinctly claim the invention. In this respect Claims 1 and 4 are amended. Claims 2, 3, 5, 7 and 15 - 25 are cancelled. A new dependent Claim 26 is added that adds a second shaft having a tire that contacts the tire on a first shaft to create a nip. Support is found in Figure 1 and page 4, line 112 to page 5, line 121.

3. The rejection of Claims 1 - 25 under 35 U.S.C. 112 is traversed by the cancellation of the phrase "elastically deformable."

5. Claims 1, 3, 11, 15, 16, 20 - 23, and 25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Gehrer (US 2,761, 547). For a rejection under 35 U.S.C. 102 to stand, each element of the claim must be found in a single reference. This clearly is not the case with Claim 1 as amended. In this respect Claim 1 can be distinguished in part by the recited limitation that the space between the shaft and opposed surface "is less than the diameter of the tires to create an off set distance" (support for an opposing surface is found at page 4, line 109 and support for the "offset distance" is found at page 8, lines 235 - 238 and in Figure 3). In Gehrer no such positioning of a shaft is disclosed. It is apparent from the disclosure of Gehrer that the roller is not intended to be preloaded so as to create an offset distance. Instead, the roller is mounted so the "outer peripheral portions of the outer annular members 5 are adapted to engage work pieces" (Column 3, lines 3 - 6). Accordingly the rejection is traversed.

Since Gehrer does not disclose a nip and offset distance, it can not disclose the features of the tire as set out in elements (b)(i) and (b)(ii).

Support for the amendment to elements (b)(i) and (b)(ii) are found respectively at page 6, lines 170 - 172; page 7, lines 247 - 250; and at page 9, lines 253 - 262.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Okumura, et al. (4,517,719). Claim 2 is cancelled and removed from consideration.

8. Claims 4 - 6 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Matson (US 3,866, 716). Claim 5 is cancelled and its subject matter is incorporated into Claim 4. The open cell structure as now recited in Claim 4 is not found in Matson. Contrary to the Examiner's position, the specification does disclose that the open cell structure provides an advantage, is used for a particular purpose, and solves a stated problem. In this respect the paragraph bridging pages 9 and 10 indicates that while the material of the compliant core 44 generates relatively little heat when it is repeatedly flexed, an open cell material is preferred in certain applications as it is able to dissipate heat more easily than a closed cell material. As this is neither disclosed nor made obvious by the reference, Claim 4 and its dependent Claim 6 should be allowable. (Claim 24 is cancelled.)

It also is noted that Gehrer does not disclose the positioning of the shaft relative to an opposing surface to provide the offset distance as set out in Claim 1. Accordingly, even if Matson were relevant, the lack of a disclosure suggesting the off set distance, as set out in Claim 1 would also work to render Claim 4 unobvious.

9. Claims 7, 13, 17, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Eiji (JP 08169573). Claims 7, 17, and 18 are cancelled. As Claim 13 depends from Claim 1 it is considered unobvious for the same reasons as set out in paragraph 4b above. In addition a non-compliant layer comprising a plastic tube as set out in Claim 13 is neither disclosed nor suggested by either Gehrer or the Japanese publication. The Japanese publication shows a roller having an outermost rubber layer 3b on an inside layer of urethane foam.

10. Claims 8 - 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Blackwood-Murray, et al. (US 4,440,295). As Claims 8 - 10 depend from Claim 1, the argument for patentability as set out in paragraph 4b above is repeated. In addition while the particular Shore hardnesses as recited in Claim 8 - 10 may be disclosed in Blackwood-Murray, it is noted that the reference pertains to a conveyor idler roller and not a roller arranged to form a nip with an opposing surface. There is no suggestion in either Gehrer or Blackwood-Murray to suggest using a material of the specified Shore hardness for the outer annular member 5 of Gehrer. This is particularly the case as the Gehrer outer member is steel whereas the material as disclosed by Blackwood-Murray is a polyurethane.

11. Claims 12 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Sawa, et al. (US 5,553, 845). Claim 19 is cancelled. As Claim 12 includes all the limitations of Claim 1, the arguments as set out at paragraph 4b above are repeated. In addition there appears to be a lack of motivation to combining these references in that it is not seen how increasing the surface coefficient of friction of the Gehrer conveyor supporting idler roller would enhance its operation.

12. Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Gehrer in view of Eiji as applied to claim 13, and further in view of Sawa et al. As Claim 14 depends from Claim 13 and includes all the limitations of Claim 1, the arguments as set out above in paragraphs "4b" and "5" are repeated.

New claim 26 is distinguished in that the references do not appear to disclose parallel shafts and tires as claimed wherein the distance from the first shaft to the nip between the tires establishes the claimed offset.

Accordingly, in view of the above amendments and comments, applicants consider that the claims remaining in the case are in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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